



This Special Edition of Network looks at issues caused by our increasing alcohol consumption in the UK, including trends, policy, and treatment. In particular we look at the role primary care can play in the growing challenges presented by alcohol use in the UK today. The following piece provides a broad overview of the effects of alcohol use, and directs you to articles that address central themes within this edition of Network. **Ed.**

Britain's biggest hangover: an overview of the effect of alcohol

The problem

The rise of problem drinking has been increasingly reported on the news in the past year, almost always with images of drunk young people in town centres on a night out. Binge drinking young people have come to represent for many what is wrong with alcohol use in the UK. Throughout the debate on 'Booze Britain'¹ the government has talked of the 'small minority' of irresponsible drinkers who are causing the problems, spoiling things for the majority of people who enjoy alcohol sensibly; and the mind's eye can easily be drawn to a picture of young people stumbling about on a Friday and Saturday night.

Teenagers *are* drinking twice as much as they did in 1990². And yet if we scratch the surface, a different, less straightforward picture emerges: we have an endemic problem that cannot be so easily explained. As a nation our alcohol consumption has been rising for decades, and with it the harms associated with this consumption. Department of Health figures suggest that more than 10 million people drink over recommended limits (this group consume 75% of all the alcohol consumed and 2.6 million drink twice the safe limits). A total of 3.5 million of us are dependent on alcohol³.

Whilst the Office of National Statistics estimated that alcohol related deaths have doubled to 8724 in England and Wales between 1991 and 2007, a recent Alcohol Concern report⁴ argues that that this is vastly underestimates the true picture and suggests the number of alcohol-related deaths may be as high as 30-40,000 (up to half that of smoking related deaths). Alcohol-related admissions to hospital have increased in England by 69%, representing rises of around 70,000 per year between 2002/2003 and 2007/2008⁵. This accounts for more than 6% of all hospital admissions.

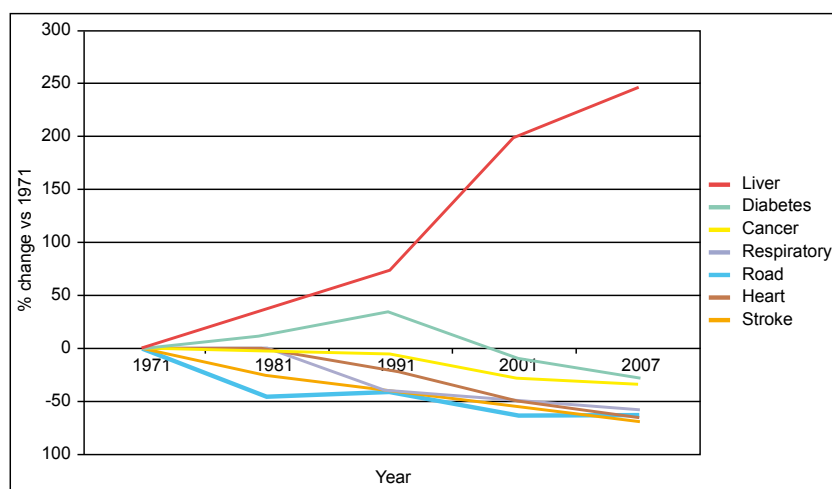


Figure 1 Movements in mortality 1971-2007 (Deaths per million of population)⁶

Whilst we must not ignore the phenomenon, young people binge drinking at the weekend do not account alone for the increases in alcohol related harm in the UK. *The rate of increase in alcohol-related deaths has risen most steeply among middle and older age groups: those in their 30s, 40s and 50s are at a much higher risk of an early death due to heavy drinking⁶.*

Whilst death rates from other categories have been declining in the UK, mortality from liver disease (seen as one of the best indicators of alcohol related ill health) has increased fivefold in people under 65 (see figure 1). This is particularly worrying when set against the fact that the wine drinking countries of Southern Europe, which historically had very high levels of liver deaths from alcohol related cirrhosis, are seeing their rates of deaths dropping. Indeed the UK overtook the death rates of Spain, Italy and France for liver deaths in 2004⁷. In this Special Edition **Simon D Taylor-Robinson's** article, *Alcohol, viral hepatitis and liver disease* gives an international perspective and outlines preventative measures for hepatocellular carcinoma (page 7). **Munir Pirmohamed** also outlines the *role genetics may play* in alcohol related liver disorders, offering future possibilities for screening and prevention (page 6).

1 The Guardian (08.01.10) Report condemns government response to alcoholism and binge drinking

2 Information Centre for Health and Social Carer (2007), Smoking, drinking and drug use among young people in England in 2006: headline figures National Centre for Social Research, National Foundation for Educational Research

3 Psychiatric morbidity among adults living in private households, 2000, ONS. http://www.statistics.gov.uk/downloads/theme_health/psychmorb.pdf

4 Alcohol Concern (2009) Future Proof: Can we afford the cost of drinking too much? Mortality morbidity and drink driving in the UK

5 Hospital Episode Statistics www.hesonline.nhs.uk

6 British Liver Trust analysis of Office for National Statistics mortality statistics covering all deaths related to liver dysfunction covering ICD K70-76 and other codes including C22-24 (liver cancer), and B15-B19 (viral hepatitis), January 2009

7 WHO, Europe, European HPA Database, January 2009

Editorial

We have become increasingly concerned about the rising problem of alcohol misuse and are very pleased to produce this Alcohol Special Edition of Network, and extend a warm thank you to the Royal College of General Practitioners Substance Misuse Unit, who have helped us finance this issue. SMMGP is joining a growing number of organisations in calling for a minimum pricing policy for alcohol to help to reverse the worrying increase in alcohol related harm that has occurred in the last few decades. This Special Edition focuses on these issues and also on ways forward, in particular the important role that primary care can play in reducing alcohol related harm.

We would also like to remind you about some important events - the Royal College of General Practitioners 15th National **Working with Drug & Alcohol Users in Primary Care Conference, Integrating Practice and Policy: Everyone's Business** on Thursday 22 - Friday 23 April 2010 at the SECC, Glasgow.

We were very impressed with the paper presentations at last year's conference and each year quality and scope of the submissions grows. Papers ranged from small-scale audits to evaluations of large projects and developments in practice. Why not submit a paper to help us to share good practice in primary care? You might win a free place at the 2011 event!

Finally, watch out for details of SMMGP's 5th National Conference which will be held in Newcastle on 15th October.



Enjoy this issue!

Kate Halliday
Network Editor

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There are other effects of alcohol consumption that are causing devastation on lives. The 'passive' effects of alcohol misuse are immense—rape, sexual assault, domestic and other violence, and drink driving to name a few. And there are wide ranging estimates of the number of children affected by the issue of parental alcohol problems, of between 300,000 and 2.5 million⁸. There has been an increase of 63% in the rates of sexually transmitted diseases in the UK between 1998 and 2007 and 76% of people in one genitourinary clinic in 2006 reported having unprotected sex as a result of drinking⁹.

Policy

Why is the UK experiencing such problems with alcohol? In January 2010 a Health Committee report¹⁰ found that between 1980 and 2007, the government's actions have been counterproductive to reducing alcohol related harm. Alcohol became 69.4% more affordable relative to household incomes, and during the same period the government has encouraged an increasingly liberal regime for off-licence sales and a more liberal on-licence regime (resulting in a massive expansion in alcohol sales in supermarkets). As alcohol has become cheaper and more easily accessible over the last 25 years there has been an increase in consumption and a large rise in alcohol related deaths.

The Health Committee report supports the views of a growing body of leading professionals and clinicians and a broad body of evidence that shows that policies restricting the supply and availability of alcohol, for example through taxation, reduced hours of sale and policies on the numbers, type or location of sales outlets are most effective¹¹ in reducing alcohol related harm. In contrast, the government's most recent strategies for responding to the growing harm associated with alcohol use, outlined in its alcohol strategy¹² have focused on measures that advocate partnership approaches, information campaigns and education programmes, strategies that have a limited evidence base for success.

At the heart of these contrasting policy approaches is a fundamental difference in philosophy that may not simply be explained by lobbying by drinks industry, or concerns by the government about unpopularity with the electorate. The government's insistence that a small minority of irresponsible drinkers are causing alcohol related problems leads to policies that aim to bring about change by

8 Cleaver et al. 1999, Tunnard 2002, Templeton et al. 2006.

9 Standerwick K, et al. 2007. Binge drinking, sexual behaviour and sexually transmitted infection in the UK. *International Journal of STD and AIDS*, no. 18, 810-813

10 Health Committee (2010) First Report: Alcohol HMSO <http://www.parliament.the-stationery-office.co.uk/pa/cm200910/cmselect/cmhealth/151/15102.htm>

11 Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube J, Grunewald P, Hill L, Holder H, Homel R, Osterberg E, Rehm J, Room R and Rossow, I. (2003) *Alcohol: No Ordinary Commodity. Research and Public Policy* Oxford: Oxford University Press

12 Department of Health, Home Office, Department for Education and Skills, Department for Culture, Media and Sport (2007) *Safe. Sensible. Social. The next steps in the National Alcohol Strategy*

In this issue

Louise Foxcroft provides an insightful view on the most used intervention in the world, Alcoholics Anonymous. **Page 4.**

Ian Gilmore eloquently outlines the arguments regarding alcohol policy, including minimum pricing, in his article. **Page 5.**

Munir Pirmohamed outlines the role genetics may play in alcohol related liver disorders, and future possibilities for screening and prevention. **Page 6.**

Simon D Taylor-Robinson's article, *Alcohol, viral hepatitis and liver disease* gives an international perspective and highlights preventative measures for hepatocellular carcinoma. **Page 7.**

Debra Jeffery takes us through the development of a screening and intervention programme for sensible drinking (SIPs) in primary care. **Page 8.**

Jack Leach and **Linda Harris** provide some sound advice about community alcohol detoxification. **Page 10.**

Chris Ford provides a summary of therapeutic interventions for alcohol dependency in primary care. **Page 12.**

Alan Clayton highlights the important role user advocates can play in alcohol treatment. **Page 14.**

Katie Porter discusses commissioning brief alcohol interventions in primary care. **Page 15.**

Caroline Thompson takes us through a different approach to inpatient detoxification using alcohol. **Page 16.**

Jack Leach and **Linda Harris** are Dr Fixits for a GP wanting to provide community alcohol detoxification. **Page 17.**

Emily Finch provides advice as Dr Fixit on methadone and alcohol use. **Page 18.**

See the latest courses and events on **page 20.**

We hope you enjoy this edition.

Editor



Don't forget to become a free member and receive regular clinical and policy updates - the newsletter can also be emailed to you - all for free www.smmgp.org.uk/membership

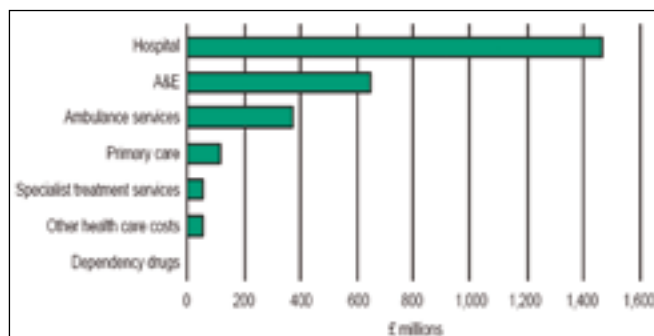
targeting a minority of individuals. Leading professionals in the alcohol field argue that the problems we are experiencing with alcohol are a societal problem: the more drinking is seen as the norm, the easier it is to access alcohol, the more those prone to drink are likely to become problem drinkers. This view calls for a societal response, targeting the whole population rather than a few individuals, an approach the Scottish government is advocating in its Alcohol Bill. **Ian Gilmore** eloquently outlines the arguments in his article on page 5.

The ultimate clash in this debate can be seen in Professor David Nutt's insistence that it is alcohol, and not illegal substances that poses the greatest threat to society: "The Government has to wake up to this time bomb and the health risks of alcohol. Across the political spectrum everyone knows that alcohol is the biggest killer"¹³. His resulting sacking could be seen as an example of the tension between political policy making and the evidence base.

Cost

The pressure is mounting on the government to take a stronger stance on alcohol, and in the current economic environment it may be prudent to do so. Alcohol cost the NHS £2.7 billion in England in the year 2006-2007 and according to the Department of Health, most of this was spent on the front-line and mainstream NHS: hospital services (inpatient and outpatient) account for 56% of the total¹⁴. GPs are presented with a range of chronic physical, mental and social problems arising from alcohol and the Health Committee was given evidence to suggest that problem drinkers consult their GPs twice as often as the average patient.

Figure 2 Annual estimated costs of alcohol harm to the NHS, 2006-07



Source: Department of Health Improvement Analytical Team report, *The cost of alcohol harm to the NHS in England: An update to the Cabinet Office (2003) study*, July 2008

The total cost to society including costs to the criminal justice system, the economy and social care were estimated by the Cabinet Office in 2003 to be £20 billion, though some estimates suggest the actual cost is over twice this figure when the more 'passive' effects of alcohol are taken into account¹⁵.

Alcohol Concern⁴ suggest a way forward, based upon research by Meier et al¹⁶ arguing that an increase of one litre in per capita consumption per year would be associated with approximately 797 extra alcohol-related deaths in England and Wales, and that reducing mortality should be the top priority for alcohol policy. They go on to argue that introducing a minimum unit price of 50p

would reduce alcohol-related hospital admissions, crime and days absent from work, saving £1 billion per year of the cost to taxpayers in England alone.

Commissioning

Commissioning of alcohol services across England is patchy. The Health Committee report highlights the fact that PCTs are not required to commission any alcohol-specific services or assess local alcohol related needs, and found there was little correlation between PCTs' spending on alcohol services and the extent of alcohol problems in their local population. It would appear that PCTs give a much higher priority to drug than to alcohol services. The Department of Health established that in 2004 an average of just £197 was spent on each dependent drinker, compared to £1744 for each dependent drug user, and National Drug Treatment Monitoring System data from 2009 indicates that just under 55,000 people were in treatment for alcohol use disorders in England as compared to more than 190,000 people engaged in drug treatment at some point in the past year.

There are some examples of primary care locally enhanced services for alcohol, but they appear to be far and few between. There is unfortunately no star rating for alcohol in the national Quality Outcomes Framework (QOF), not even in relation to hypertension or diabetes, which must be limiting consistent alcohol service provision in primary care. Articles by **Katie Porter**, *Commissioning brief alcohol interventions in primary care* (page 15) and **Janet Crampton** on commissioning learning sets on our website <http://www.smmgp.org.uk/> give examples of good practice regarding commissioning.

Treatment

Perhaps because of the difficulties regarding commissioning, the Health Committee report found alcohol services to be poorly planned and funded, sighting inconsistent services regarding home detoxification, and hospital services for liver patients.

There is strong evidence that brief interventions by primary health care professionals directed at hazardous drinkers are both clinically effective and cost effective in reducing the harm caused by alcohol¹⁷. A single brief intervention reduces drinking effectively in 1 in 8 of those approached for up to 2 years and possibly 4 years and is far more effective than brief interventions for smoking (where brief interventions work for 1 in 12)¹⁸. Brief interventions for alcohol work best if repeated by several different health workers¹⁹. Currently there is no system for routine screening and management of alcohol misuse in primary or secondary care settings in the UK. We hope that **Debra Jeffery's** outline of the development of a screening and intervention programme for sensible drinking (SIPs) in primary care will help clinicians to develop their practice in this area (page 8).

As clinical practice is at the core of Network, there are a number of clinical articles in this Special Edition. **Jack Leach** and **Linda Harris** provide some sound advice about *community alcohol detoxification* on page 10 and **Chris Ford** provides a summary of *therapeutic interventions alcohol dependency in primary care* on page 12. **Emily Finch** provides some excellent advice as Dr Fixit on *methadone and alcohol use* on page 17 – and for Pharmacist Fixit's views on the same topic see **Nazmeen Khideja's** article

13 The Times 05.11.09 Professor David Nutt attacks ministers over 'failure' on alcohol

14 National Audit Office, *Reducing Alcohol Harm: Health Services in England for Alcohol Misuse*, 2008

15 Lister G, *Evaluating social marketing for health-the need for consensus*. Proceedings of the National Social Marketing Centre, 2007

16 Booth, A., Meier, P., Stockwell, T., Sutton, A., Wilkinson, A., Wong, R., Brennan, A., O'Reilly, D., Purshouse, R., and Taylor, K. (2008) *Independent Review of the Effects of Alcohol Pricing and Promotion: Part A: Systematic Reviews*, online, available from: http://www.dh.gov.uk/en/PublicHealth/HealthImprovement/Alcohol-misuse/DH_4001740 [Accessed 15/10/2009].

17 Kaner EFS, Beyer F, Dickinson HO, et al. *Effectiveness of brief alcohol interventions in primary care populations*. Cochrane Database of Systematic reviews, 2007.

18 Moyer, A., Finney, J., Swearingen, C. & Vergun, P. (2002) Brief Interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment seeking populations, *Addiction*, 97, 279-292.

19 National Audit Office report: *Reducing Alcohol Harm: Health Services in England for Alcohol Misuse*, 2008

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on our website <http://www.smmgp.org.uk/>. There are details of the *Royal College of General Practitioner's Certificate in the Management of Alcohol in Primary Care*, essential training for those interested in developing their skills and knowledge of problematic alcohol use on page 20. **Louise Foxcroft** (page 4) provides an insightful view on the most used intervention in the world, *Alcoholics Anonymous* and **Alan Clayton** highlights the important role *user advocates* can play in treatment on page 14. Finally, there is a different approach to *inpatient detoxification* introduced by **Caroline Thompson** on page 16.

Conclusion

Action must be taken to tackle the growing alcohol related harm in the UK. Alcohol policy measures should combine both policies

Alcoholics Anonymous is without doubt the largest worldwide intervention for people with alcohol problems, and plays an invaluable role in improving people's lives. Louise Foxcroft provides an overview of this unique and essential organisation. Ed.

Alcoholics Anonymous – an overview



Alcoholics Anonymous (AA) is for people whose drinking costs them more than money. It is all down to alcoholics sharing, directly, their first-hand experiences of problem drinking and of recovery. As a Non-Alcoholic Trustee I don't pretend to understand what alcoholism is like in an emotional or physical sense. I might understand it in an historical,

theoretical, or medical sense, but I don't know what it feels like in a visceral way. AA members do. This is their great strength.

AA's suggested Twelve Steps, the principles based on the recovery experiences of early members, can help to unravel confused thinking and difficult emotions. The Steps are not just a means of staying sober, they are a suggested structure for living presented in a way that leaves an alcoholic free to approach them as they will. No member is ever told that she or he must perform the Steps or risk returning to a life of drinking; people approach them as and when they feel able to.

AA doesn't provide the initial motivation for sobriety, nor does it solicit members. It doesn't make medical diagnoses, nor follow up or try to control its members. It doesn't provide drug treatments, nursing services, housing, food, jobs, money, or any other welfare or social services. It is a unique, non-professional, worldwide, all-inclusive fellowship that costs nothing and is accessible to anyone who wants to stop drinking, get better, and help others to get better, too. It includes men and women [about one third of members are women], people of different races, ages, nationalities, occupations, religions, agnostics and atheists. Some come to meetings under pressure from court, an employer, or other agency, but AA is not concerned with whoever is making the referral: it is the problem drinker who counts.

The only requirement for AA membership is a desire to stop drinking, and any two or three alcoholics who get together for this reason can form an AA Group. The idea is that if there is a meeting then go to it, if there isn't then start one - this is precisely how AA has grown here in Great Britain, from its first meeting over sixty

directed at the whole drinking population *and* measures directed at more risky drinkers with more detrimental drinking patterns. SMMGP is joining the growing number of organisations and individuals to call for a minimum alcohol pricing policy in the UK. The evidence base is clear that primary care can play an important role in providing treatment, but only with the support of strong commissioning and policy based on evidence.

Kate Halliday SMMGP Policy and Development Manager

years ago. There are currently about 4000 Groups in Great Britain and English-speaking Europe, each meeting regularly. With over 100,000 groups in 180 countries, AA membership worldwide is estimated at over two million individuals. Most meetings are 'closed', meaning they are for alcoholics only and take the form of group discussions in which any member who wants to share their thoughts can do so. At 'open' meetings members can bring relatives or friends and, usually, anyone interested in AA is also welcome.

Each autonomous AA group is free to work out its own way of holding meetings, and a chairperson and other officers are elected usually once or twice a year - their only responsibility is to ensure meetings run smoothly, they don't give orders or impose rules. Groups everywhere share their experiences via an intergroup and regional service structure and keep in touch with the AA General Service Office in York, with representatives attending the annual conference. The real impetus lies at the broadest level, with the individual, and it filters down to the General Service Board which implements, as well as it can, the wishes of the Fellowship. The responsibility of the individual is at the core.

“AA is everywhere, it is straightforward and it is free”

Meetings also take place within prisons, hospitals and other institutions at the request of the appropriate authorities, and can provide contact for those being released or discharged. AA is more than willing to co-operate with any organisation which deals with alcoholism but, importantly, following its Twelve Traditions, remains always non-affiliated, non-professional, and self-supporting. It does not advertise itself but members are always willing to speak to groups of professionals if asked, including those in the fields of health and social services, education, employment, armed forces, prisons and probation, and there is a great deal of supporting literature available. The AA website www.alcoholics-anonymous.org.uk carries general information for newcomers, professional agencies, media, and members engaged in service, plus a search facility for meetings nationwide. The National Helpline telephone number, 0845 769 7555, puts people in direct contact with a local member when needed.

AA is everywhere, it is straightforward and it is free. It is not a quantifiable entity but it is without doubt immensely valuable, and its principles underpin so many subsequent models and therapies. It has humanity, conviction and commitment, and it works.

Louise Foxcroft, Non-Alcoholic Trustee on the General Service Board of Alcoholics Anonymous (Great Britain)

Ian Gilmore examines approaches to reduce alcohol related harm, and suggests that the government needs to rethink their strategy to include minimum pricing, a strengthening of preventative treatment, and a review of alcohol marketing. Ed.



Which costs most?

The big drink debate – is it time to up the ante?

During 2009 we saw a genuine shift in the debate around alcohol policy. In March the Scottish government announced its support for a policy of minimum unit pricing now embodied in the Alcohol Bill that is currently being debated. The Chief Medical Officer in England (who has since resigned) made clear his very public support for the policy¹. The Home Office has consulted on proposals for a mandatory code on alcohol retailing which includes measures to ban drinks promotions that encourage irresponsible drinking and aims to help drinkers make healthy choices. Running alongside these developments the Health Select Committee carried out a wide-ranging inquiry into alcohol misuse.

These positive moves on the alcohol policy front were dampened by attitudes from inside government and the cautious approach of the Department of Health. The Prime Minister openly squashed the Chief Medical Officer's support for minimum pricing when he said "We don't want the responsible, sensible majority of moderate drinkers to have to pay more or suffer because of the excesses of a small minority"². The Department of Health has not acted on the evidence from the Sheffield University study of alcohol policy interventions, which they commissioned³. The study demonstrated the potential for a minimum unit price to cut down on levels of harmful drinking. It suggests that a minimum price of 50p per unit of alcohol would lead to over 3,000 fewer deaths per year, 97,900 fewer hospital admissions and 10,300 fewer violent crimes in England per year.

This deflection by the Prime Minister and the failure to take account of the evidence hits on a more serious problem about

the philosophy that underpins current approaches to alcohol policy. This is the concentration in England on 'binge drinking' youngsters and on the antisocial or criminal consequences of heavy drinking. This has allowed politicians to project the problem onto a small minority of the population missing the point that there are hundreds of thousands of people – the silent majority – who in their own homes are quietly opening a bottle of wine each evening and over the week are unknowingly drinking well over the recommended limits, storing up problems for the future. The alcohol policy debate must now move beyond binge drinking and antisocial behaviour and focus on the health of the whole population. There is now consistent evidence to support population-level approaches to preventing alcohol related harm. Consumption data confirms that excessive drinking is not limited to a particular social group but is widely spread across the whole of society. We must look more closely at the huge burden of dependence, damage to third parties ('passive drinking' or 'collateral damage') and the social and economic costs of alcohol misuse. A bigger more public conversation is needed about our attitudes to alcohol as a society.

In addition to tackling price and shifting our approach to alcohol policy towards a more population-based approach there are immediate measures that can be taken that can reduce the burden of harm. There needs to be better resources for brief screening and brief interventions across primary and secondary care. Brief interventions are a quick and effective means of engaging with large numbers of drinkers who are not dependent, but are still harming their health. There is a benefit in about one of every eight patients receiving the intervention, which compares well with many more expensive and established treatments in other areas. It is also possible that the effects spread into the wider community, promoting a deeper cultural behavioural change.

“Now is the time for politicians to up their game. They must see alcohol as a major public health issue on a par with obesity and smoking that has an impact on the whole population”

We must also urgently address issues around the marketing and promotion of alcohol to children and young people. Policy options that could be considered include the introduction of an 'end-frame' of alcohol health information comprising one-sixth of air time or press space attached to all alcohol advertising; a ban on alcohol advertising (either branded or supermarket) from 6am through to 9pm regardless of the predicted age of audience of a programme and a major review of the voluntary broadcast advertising code to better protect young people.

Now is the time for politicians to up their game. They must see alcohol as a major public health issue on a par with obesity and smoking that has an impact on the *whole* population. The government must implement a strong evidence-based approach that is aimed at reducing overall alcohol consumption and alcohol-related health harm. The cornerstones of this approach must be strong public policy measures on price and the promotion and marketing of alcohol, better commissioning of treatment services, and greater investment in prevention.

Professor Ian Gilmore, President, Royal College of Physicians and Chairman, Alcohol Health Alliance

Karishma Chandaria, Policy Advisor, Alcohol Health Alliance

1 Chief Medical Officer, 2009, '150 Years of the Annual Report, Department of Health

2 <http://www.guardian.co.uk/politics/2009/mar/16/gordon-brown-alcohol-pricing>

3 http://www.dh.gov.uk/en/PublicHealth/HealthImprovement/Alcoholmisuse/DH_4001740

Munir Pirmohamed describes the role genetics may play in alcohol related liver disorders, offering future possibilities for screening and prevention. **Ed.**

Genetics and alcohol-related liver disorders

Alcohol, in its many guises, is enjoyed by many people all over the world. However, it is also abused and misused by many others, which can have devastating consequences on individual health and on society. This is increasingly recognised in the UK, where alcohol misuse and its effects on almost any bodily system are now regarded as a public health problem which needs multi-faceted interventions.

The liver is one of the commonest organs to be affected in patients who misuse alcohol. However, not all patients who abuse alcohol develop alcoholic liver disease (ALD). There is a good relationship between alcohol consumption and the prevalence of ALD at a population level - the relative risk of ALD is increased above a threshold of 7-13 drinks/week in women and 14-27 drinks/week in men¹. However, this is not seen at the individual level, with histological characteristics varying in unselected heavy drinkers, fatty liver being the commonest abnormality, and cirrhosis being found in less than 10%.

Although the amount drunk does determine susceptibility, various other factors are also important including dietary factors and gender. For example, women are more susceptible to ALD because of the lower volume of distribution of alcohol in women, and the effects of estrogens on cytokine responses and metabolic pathways².

In addition to the above, there is no doubt that genetic factors play an important role in predisposing to ALD. Twin studies have shown that the concordance rate is higher in monozygotic than in dizygotic twins³, and heritability of ALD ranges between 50-60%. In order to investigate the genetic basis of ALD, most studies have used a case-control design and adopted a candidate gene strategy, i.e. variants in genes encoding proteins thought to be involved in the pathogenesis of ALD (including enzymes involved in alcohol metabolism) have been investigated, and the frequency of the variant compared between cases and controls. However, the results to date have been rather disappointing for many reasons:

- We do not fully understand the pathogenesis of ALD, and thus the list of candidate genes studied to date is likely to be grossly inadequate.
- Most studies have been rather small and have concentrated on one or a small number of genes, focusing largely on individual variants within each gene. There are several limitations here including inadequate statistical power, inability to capture the genetic diversity within each gene, and by concentrating on single nucleotide polymorphisms,

which are the commonest form of genetic variation, we have ignored structural variations, which may be equally important.

- Different studies have included patients with different phenotypic manifestations, for example hepatitis and cirrhosis, often treating them as the same conditions, when we do not actually know whether the genetic predisposition for each condition is the same or not. Furthermore, although histology may be the gold standard for evaluating the disease pattern in an individual with liver disease, biopsy either may not be possible or clinically indicated, further diluting the accuracy of the phenotype.
- The genetic contribution to ALD is not known. If we assume that predisposition is dependent on small effects of many genes interacting with environmental factors (such as amount consumed, concomitant infections, nutrition), then the predisposing genetic variants are likely to be neither necessary nor sufficient by themselves to cause the disease, but their presence would increase the risk of the disease. Therefore, much larger numbers of patients are required to identify genetic variants of low effect size, as has been demonstrated for other complex diseases such as type II diabetes.

There have been remarkable advances in genomics in this century from the completion of the human genome project to mapping of human genetic diversity. This has provided us with an unprecedented ability to identify genetic predisposition, for example through the use of genome wide association studies. This is a technology which allows for an unbiased assessment of genetic predisposition across the whole genome, and has recently been shown to be highly useful in identifying predisposing factors for flucloxacillin-induced cholestatic hepatitis⁴, primary biliary cirrhosis⁵ and response to interferon in patients with hepatitis C⁶.

To date, genome wide association studies have not been performed in patients with ALD, but there are plans to do this both in the UK and US, for example, by the UK consortium on the genetics of alcoholism. In order to succeed however, the studies will need to be adequately powered - it is important to note that the majority of studies in complex diseases have used a minimum of 2000 cases, while in conditions such as type II diabetes, meta-analysis are now being performed in populations in excess of 50,000. Furthermore, phenotyping of the patients will need to be standardised across the different centres; unless the phenotype is correct, we may miss important genotypic predictors.

Why is it important to do this research? There are several reasons: (a) it might identify subjects at high risk which would allow stratification of interventions to stop drinking; (b) it would identify pathways of importance in the pathogenesis of ALD which would provide potential new drug targets, and biomarkers for diagnosis; and (c) it would provide insights into the pathogenesis of non-alcoholic liver diseases, and the overlap between ALD and these diseases.

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4 Daly AK, Donaldson PT, Bhatnagar P, et al. HLA-B*5701 genotype is a major determinant of drug-induced liver injury due to flucloxacillin. *Nat Genet* 2009;41:816-9.
5 Hirschfield GM, Liu X, Xu C, et al. Primary biliary cirrhosis associated with HLA, IL12A, and IL12RB2 variants. *N Engl J Med* 2009;360:2544-55.
6 Ge D, Fellay J, Thompson AJ, et al. Genetic variation in IL28B predicts hepatitis C treatment-induced viral clearance. *Nature* 2009;461:399-401.

Simon D Taylor-Robinson describes the links between alcohol, viral hepatitis and liver disease, and identifies the importance of early diagnosis due to rising hepatocellular carcinoma rates in the UK. Ed.

Alcohol, viral hepatitis and liver disease

Hepatocellular carcinoma (HCC) is the third commonest cause of cancer-related death worldwide and its incidence remains alarmingly high. It is rising across the world with few exceptions and there is a distinct geographical variation (figure 1).



Figure 1. Age-Standardised incidence rates of liver cancer in males per 100,000 population. Adapted from GLOBOCAN 2002 with permission (1).

The highest incidence rates are in sub-Saharan Africa and the Far East. This reflects the high prevalence of hepatitis B virus carriage in these areas, which is the major worldwide risk factor for HCC. In China and other parts of Asia, hepatitis B virus infection is usually acquired vertically from mother to child, whereas sibling-sibling transmission in infancy is the more common route in Africa. Encouragingly, between 1978–1982 and 1993–1997, decreases in incidence were reported among Chinese populations in Hong Kong, Shanghai and Singapore. This reduction in HCC rates is almost certainly due to a widespread hepatitis B vaccination programme, resulting in the reduced burden of chronic hepatitis B viral carriage. However, in the UK there has been a steady increase in HCC over the last two decades, which is mostly related to the prevalence of hepatitis C-related liver disease and the widespread availability and earlier use of alcohol, which has led to a doubling in the prevalence of alcohol-related cirrhosis, particularly amongst young Britons.

For almost all countries, males have higher HCC incidence rates than females, with a usual ratio of 2:1. The reasons for this discrepancy are likely to be multi-factorial, in part due to higher rates of hepatitis B and hepatitis C infection in the male population, but also social factors such as higher alcohol intake and obesity in men. However, testosterone levels have been shown to correlate with HCC risk, so there is probably also an innate risk for males, based on hormonal profiles.

The majority of patients with HCC have underlying cirrhosis. Hepatitis C is the most important risk factor for HCC in the UK and Western Europe: epidemiological studies have shown up to 70%

of UK patients with HCC have anti-HCV antibodies in their serum. Current estimates suggest up to 1% of the UK population have HCV with about 30% developing cirrhosis over a variable period of about 30 years (the time period is reduced if there is alcohol excess as a cofactor). The risk of HCC correlates with advancing cirrhosis, but its development has been shown to occur decades after initial infection. We are likely to see increasing hepatitis C-related HCC incidence over the next few years in the UK and the Health Protection Agency has estimated that there will be a doubling in current numbers by 2015.

Alcohol has never been proven to cause liver cancer directly, rather the risk for HCC development arises through the establishment of alcohol-induced cirrhosis, which in common with any underlying cause of end-stage liver disease carries a higher risk for the development of this type of liver tumour. Abstinence does not appear to affect HCC risk once cirrhosis is established. However, alcohol has been proven to magnify other risk factors, linearly increasing the risk of HCC in other liver disease aetiologies, such as in those infected with viral hepatitis.

Early diagnosis remains the key to effective treatment, which is typically made by hepatic ultrasound in combination with serum alpha-fetoprotein (AFP) levels. Through international consensus, a diagnostic algorithm for HCC has been developed. In patients with cirrhosis with a lesion of >2cm on ultrasound, there is a very high probability that this is a HCC. If the serum AFP is raised, this diagnosis is more certain. If the serum AFP is normal, then a further imaging modality, CT or MRI, will usually suffice to classify the lesion.

Liver transplantation and surgical resection are considered curative options for small (<3cm) HCCs and ablative techniques, such as percutaneous ethanol injection, radiofrequency ablation and trans-arterial chemoembolisation are now established techniques.

Chemotherapeutic agents for HCC have been relatively limited in their role, given the slow-growing nature of the tumour and lack of insight into the molecular pathways which contribute to its development. However, the recent study of sorafenib, an oral multikinase inhibitor, has perhaps altered the perception of chemotherapeutic options for HCC.

With an eye on the future, effective screening of at-risk patients (those with cirrhosis) should be instituted with serum AFP and liver ultrasound examinations every 3 to 6 months. Over the next few years, there is likely to be a paradigm shift in the treatment of HCC. Transplantation will remain the mainstay of curative treatment in those with curable disease but new ablative treatments, such as high intensity focused ultrasound (HIFU), are being developed. The recent introduction of sorafenib for treatment of advanced HCC may be widened to earlier disease or combined with other chemotherapeutics for the treatment of HCC. It is certainly an exciting time for a cancer that affects the world in such a devastating manner.

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Debra Jeffery takes us through the Screening and Intervention Programme for Sensible Drinking (SIPS) trial which will provide essential evidence for the effective implementation of brief interventions across a variety of settings, including primary care. **Ed.**

Implementing alcohol screening and brief interventions in general practice: SIPS trial and tribulations

The SIPS (Screening and Intervention Programme for Sensible Drinking) trial is a national study investigating the effectiveness and cost-effectiveness of alcohol screening and brief interventions across three settings – Primary Health Care (PHC), Accident and Emergency Departments (AED) and the Criminal Justice Setting (CJS). It is aimed at increased risk, high risk and binge drinkers, rather than alcohol dependents.

There is a growing body of evidence documenting the effectiveness of brief alcohol interventions and over the last quarter of a century there have been more than fifty-six trials, with over twenty of these in primary care. Kaner et al (2009)¹ carried out a systematic review of the effectiveness of brief alcohol interventions in primary care and concluded brief interventions result in significant reductions in weekly consumption for men, still evident a year later, but the available data by gender did not show the same reduction for women at one year follow up. There were no statistically significant reductions between participants who received an extended intervention compared to those who received a brief intervention. The authors further suggested that the results of these trials can be applicable to routine clinical practice.

There are also a number of advantages of locating alcohol screening and brief interventions in the primary care setting. Predominately, GPs have access to a high proportion of the population, over three quarters of whom visit their GP at least once a year. Visiting a GP practice does not have the stigma associated with it which visiting a specific alcohol service would have. Intervention is possible at 'teachable moments' and in the context of an ongoing relationship with the patient. Finally, advice from GPs, practice nurses and other primary health care staff is likely to be respected.

The SIPS programme, funded by the Department of Health, is designed as three cluster randomised clinical trials (PHC, AED & CJS). Its aims are to assess what the barriers and facilitators are to implementation in a typical setting, the most effective screening approach and tool and the most effective and cost-effective intervention approach. Common measures and designs were used to allow comparisons within and across the different settings.

The primary health care arm of the programme involved over

24 GP practices across three regions in England (North East, London and South East). The study evaluated: two screening tools; the Modified Single Alcohol Screening Question (M-SASQ) versus the Fast Alcohol Screening Test (FAST); two screening approaches, universal versus targeted screening; and three intervention approaches, a patient information leaflet, five minutes brief advice or twenty minutes brief lifestyle counselling. The targeted screening conditions were injuries, hypertension, gastrointestinal problems, mental health problems and new registrations. These were chosen by surveying a sample of GPs on what they believed the targeted conditions should be.

The recruitment target was 744 patients, approximately 31 per surgery. Recruitment began in May 2008 and was completed in July 2009. Eleven practices completed recruitment, two dropped out and seven under performed so a further eight GP practices were recruited. Financial incentives were given to the participating practices and to participants. Furthermore, each practice received full onsite training in alcohol screening and brief interventions by the researcher and alcohol health worker. Training staff in screening and brief advice including role play, took one to two hours and the brief lifestyle counselling training took one hour, along with one to two role play training sessions with actors. A total of 189 staff were trained including both nurses and GPs.

“Visiting a GP practice does not have the stigma associated with it which visiting a specific alcohol service would have”

Participants self-completed a baseline questionnaire consisting of the AUDIT, the gold standard against which the shorter screening questionnaires are being compared, and other questions about their health, wellbeing and use of services. The 6 and 12 month participant follow-ups consist of similar questions.

The alcohol screening process

For the following question - 1 standard drink = 1 unit of alcohol, an indication of standard drinks is provided in the diagram below.



A standard UK unit of alcohol is 8g of ethanol. However, some patients have difficulties calculating their alcohol consumption by the unit. In the SIPS screening tools, a standard drink is equal to one standard unit, and the screening tools are accompanied by the above picture that shows what a standard drink is, e.g.

¹ Kaner, E., Dickinson, H., Beyer, F. et al., (2009) The effectiveness of brief alcohol interventions in primary care settings: a systematic review. Drug and Alcohol Review, 28, p301-323.

one small glass of wine. However, many beers, lagers and ciders are higher than 3.5% alcohol blood volume (the strength of beer used to calculate the standard unit) and therefore likely to count as more than two standard drinks. A typical glass of wine in a pub now is 175ml, two units, rather than 125ml, one unit. Some bars and pubs in England serve double shots as the norm and drinks poured at home are often larger than standard measures. Clinicians were trained to help the patient identify how many standard drinks they were drinking when screened for alcohol misuse.

The first of the two screening tools evaluated in the SIPS programme was the M-SASQ. The question is gender specific and if a patient answers 'monthly', 'weekly' or 'daily or almost daily' the screen is positive.

MEN: How often do you have EIGHT or more standard drinks on one occasion? WOMEN: How often do you have SIX or more standard drinks on one occasion?				
Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The M-SASQ Screening Tool

The second screening tool used was the FAST. The first question acts as a filter question and if a patient answers 'weekly' or 'daily or almost daily', it is a positive screen and there is no need to ask the rest of the questions. If a patient answers 'never', 'less than monthly' or 'monthly' to question one, the clinician proceeds with the other questions. An overall score, including the patient's response to the first question, of three or more is a positive screen.

Questions	Scoring system				
MEN: How often do you have EIGHT or more drinks on one occasion? WOMEN: How often do you have SIX or more drinks on one occasion?	0 Never	1 Less Than Monthly	2 Monthly	3 Weekly	4 Daily or Almost Daily
Only answer the following questions if your answer is monthly or less					
How often during the last year have you been unable to remember what happened the night before because you had been drinking?	0 Never	1 Less Than Monthly	2 Monthly	3 Weekly	4 Daily or Almost Daily
How often during the last year have you failed to do what was normally expected of you because of your drinking?	0 Never	1 Less Than Monthly	2 Monthly	3 Weekly	4 Daily or Almost Daily
Has a relative or friend, a doctor or other health worker been concerned about your drinking or suggested you cut down?	0 No	1	2 Yes on one occasion	3	4 Yes on more than one occasion

The FAST Screening Tool

Intervention tools.

The first intervention tool used was the Patient Information Leaflet, a free resource on alcohol produced by Department of Health. It is a therapeutic tool which contains non-direct, non-confrontational and non-judgemental advice and information regarding alcohol. The information is provided in a real and down to earth manner that people can relate to and identify with.

The second intervention tool used was the five minute brief advice tool, "Brief advice about alcohol risk" which has been developed for the SIPS programme. It is based on the "How much is too much? Simple Structured Advice intervention tool", developed

as part of the UK version of the Drink-Less BI programme² from a prototype used as part of a World Health Organisation collaborative study on alcohol screening and brief intervention. It shows consumption risk categories and associated common effects of drinking above the recommended levels. It suggests asking the patient how they feel about this information which gives them an opportunity to consider what they have been shown and to discuss what it means to them. It lists some of the benefits of cutting down and some strategies patients can use to reduce their consumption.

The third intervention tool used was the 20 minute SIPS Brief Lifestyle Counselling (BLC) Tool which has been developed for the SIPS programme. It is based on the "How much is too much?" Extended Brief Intervention tool developed as part of the UK version of the Drink-Less BI programme³ from a prototype used as part of a World Health Organisation collaborative study on alcohol screening and brief intervention. It has six areas of discussion and should consist of open questions and motivational talk, where the patient is encouraged to explore their alcohol use and consider change. The intervention should emphasise the positives and be solution-focused. The six areas cover: what a typical drinking day is like for the patient, scaling questions on how important it is for the patient to reduce their drinking and how confident they would be to succeed in reducing their drinking, the pros and cons about reducing their drinking and their own strategies to reduce their drinking.

All intervention tools and protocols are available from the SIPS study website (<http://www.sips.iop.kcl.ac.uk>).

Practical experiences and recommendations

Results of the study will not be available until Autumn 2010 as data collection finished in 2009 and 6 and 12 month follow-ups need to be completed. However, in relation to implementing alcohol screening and brief interventions some anecdotes on practical experiences and recommendations can be made.

The SIPS team received positive feedback overall regarding training primary health care staff. The research elements and alcohol units tended to be the most challenging parts of the training and most staff welcomed receiving training. Adequate space, staff availability, time and implementation issues slowed the training stage and would need to be fully addressed to start screening and brief interventions in clinical practice.

Surgeries who successfully implemented the study often had a strong local lead who championed the study within the practice and helped motivate staff to participate. Implementation was more successful when practices followed the research protocol and ideally when the intervention was delivered by the same clinician who conducted the screening, when most of the clinicians at the surgery were involved in the study, and when the model the surgery employed fitted with local needs and resources.

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2 Heather, N., Girvan, M., Kaner, E. & Cassidy, P., *Implementing screening and brief intervention in pilot general practices in the Tyne and Wear Health Action Zone*. 2008, University of Northumbria: Newcastle UK.

3 Ibid.

Jack Leach and Linda Harris provide an outline of the rationale, assessment and process for community alcohol detoxification. For more advice on this topic, see their answer as Dr Fixit, page 17. Ed.



Community alcohol detoxification

Introduction

Many general practitioners are asked either by patients, families, alcohol workers or other health professionals to prescribe an alcohol "detox" to patients. Often this is with great enthusiasm about its success, and limited knowledge about its risks. What harm can the prescription do? Unfortunately what evidence there is suggests that assisted alcohol detoxification does not appear to have much effect on longer term outcome from problem and dependent drinking and for a small minority has serious short and longer term harmful consequences¹. A general practitioner should approach an alcohol detoxification with their eyes open. Be aware of the risks as well as benefits, ensure the patient is well monitored and any complications are dealt with promptly and effectively.

That said the way in which the GP approaches such a consultation – many of which are associated with a patient and family in crisis – can impact on a patient's readiness to change in the future and their willingness to present through primary care.

This article outlines the rationale for carrying out an assisted alcohol detoxification – what the benefits are, what the risks are, what the programme

should look like, what monitoring there should be and what aftercare should be considered. It also outlines under what circumstances it is safe to undertake such treatment in a primary care setting.

Why do alcohol detoxifications?

Some drinkers who wish to stop feel unable to do so without some help. What may hinder their attempts and their chances of success is the withdrawal symptoms they experience when they stop even for a relative short time. A small proportion of drinkers may become seriously ill if they stop drinking without medical help. Some patients are so ill from their drinking or their associated health problems are so aggravated by their drinking that it is vital that they stop.

This does not mean that dependent drinkers cannot reduce their consumption gradually and stop over a period of time. However, for many there are pressing medical and social reasons to stop drinking sooner rather than later, and for others they feel unable to control their drinking or have tried and failed.

What are the benefits?

A significant minority of people undergoing assisted community alcohol detoxification will complete the programme and remain abstinent for a period after^{2,3}. This appears more successful and safer than if dependent drinkers try to stop drinking suddenly themselves.

Risks

The sudden cessation of drinking in a seriously dependent drinker can have serious and on occasion fatal complications which is why it is vitally important to take time to explain the risks to patients and carers so that treatment is approached in a step wise manner. If a patient is severely dependent and they do not receive sufficient assistance after stopping drinking they may develop severe, potentially life-threatening alcohol withdrawal syndrome. Features of the syndrome include, withdrawal seizures, delirium tremens, Wernicke's encephalopathy and alcoholic hepatitis. The key symptom of these syndromes is the development of confusion, worsening after the start of the detoxification so it is not attributable to alcohol consumption.

It is possible to predict the patients most

likely to suffer such complications by identifying the following:

- a past history of a seizure on withdrawal, older age, with long history of unremitting heavy, regular drinking
- the presence of alcohol related diseases such as chronic liver disease and pancreatitis, proximal myopathy, peripheral neuropathy, chronic alcohol related brain syndromes, enteropathy with poor nutrition status and weight loss.

Patients with such histories should be considered for inpatient detoxification. These syndromes may be prevented by higher dose and flexible benzodiazepine regimens, parenteral B vitamins and attention to fluid and electrolyte balance. In the longer term, unrecognised and untreated Wernicke's may lead to Korsakoffs syndrome which is irreversible cognitive impairment. Alcohol detoxification has been shown in animal studies to directly cause neurotoxicity, and this may contribute to long term alcoholic dementia.

Benzodiazepines act on many of the same neural systems as alcohol explaining why they are helpful for alcohol detoxification but also why high doses are needed to overcome the cross tolerance with alcohol. Benzodiazepines have a major interaction with alcohol. Because they act on many of the same neurotransmitters and receptors that alcohol does, if during their prescribing the patient drinks they may get severely intoxicated with the risk of respiratory depression, accidents and misjudgements.

Alcohol detoxification may aggravate associated physical and mental illnesses such as ischaemic heart disease, chronic obstructive pulmonary disease, diabetes, severe depression and psychosis.

Assisted detoxification

Assisted alcohol detoxification refers to a patient stopping drinking in a supervised programme with the aid of prescribed medication. There are three parts to it; selection and preparation, carrying out the detoxification and aftercare for relapse prevention.

Selection and preparation

You need to satisfy yourself of four things:

- that the patient is aware of the risks and benefits and what is involved and agrees to comply with the programme
- that the patient is alcohol dependent and that other approaches such as gradually

1 Heather N, Peters T, Stockwell T (2001). The international handbook of alcohol dependence and problems. Chichester: John Wiley and Sons publishing.

2 Edwards G, Marshall J, Cook C (2003). The treatment of drinking problems: a guide for the helping professions. Cambridge: Cambridge University Press.

3 Cooper D (1994). Alcohol home detoxification and assessment. Oxford: Radcliffe Medical Press.

reducing have been tried and not been helpful. There are various structured questionnaires to help with this, such as severity of alcohol dependence questionnaire (SADQ⁴)

- that the patient is not at significant risk of serious alcohol withdrawal syndrome
- that the patient is appropriately monitored and supported by practice staff and family members.

Doing it

Most alcohol withdrawal symptoms and severe alcohol withdrawal syndromes occur within the first three days of stopping drinking^{1,2,3}. Traditionally a seven to ten day programme is offered recognising the acute withdrawal state may be delayed in a small minority of patients and also that the majority of patients will need ongoing support in the weeks to months immediately after stopping drinking to adjust.

The programme offered should include prescribed medication combined with social and psychological support, monitoring and management of any complications, including dose adjustment of prescribed benzodiazepines, B vitamins as prophylaxis against neurotoxicity and symptomatic treatment where needed of associated withdrawal symptoms such as nausea and vomiting.

Chlordiazepoxide is the benzodiazepine of choice in this country. Higher doses are required and although a flexible prescribing regimen mapped to withdrawal symptoms has been shown to be more effective and patient centred, for practical and safety reasons most community detoxification programmes use fixed dosing. A starting dose of between 80 and 120mg of chlordiazepoxide on the first day are commonly prescribed regimes, reducing over 7 days to zero.

B vitamins are generally given orally and should be started at least 2 weeks before the start of the detox and continued for 6-8 weeks after. Enteropathy with malabsorption is common in chronic drinkers and some authorities would recommend parenteral B vitamins, even for community detoxification in seriously dependent and obviously health neglected individuals¹. Whilst primary care professionals have been traditionally reluctant to offer Pabrinex in the community for fear of anaphylaxis

the risk of adverse and allergic reaction is low (around 1 per million doses for intravenous Pabrinex and 1 in 5 million for intramuscular).

“Social support is a vital element to a safe, successful community detoxification”

There is interest in the use of various drugs to reduce neurotoxicity during alcohol detoxification. These neuroprotective agents include acamprosate and carbamazepine. We await the publication of National Institute for Health and Clinical Excellence guidelines in the management of alcohol misuse for definitive guidance on the use of these drugs in the primary care setting.

Social support is a vital element to a safe, successful community detoxification. The patient should have relatives or friends with them at all times, particularly during the first four days, to support and monitor them. Carers need to be aware of how serious complications might present and what to do in that event of emergencies. Ideally the patient should be visited daily by practice staff and the following monitored:

- severity of withdrawal symptoms and signs - the pulse is particularly useful. If the patient is anxious, pale, sweaty, tremulous with a pulse over 100 minute, this is not a good sign
- conscious level and degree of tremor and ataxia. Confusion is a key sign for a severe withdrawal syndrome and if present should warrant consideration of urgent transfer to hospital
- use of medication
- any drinking, if necessary breathalysing the patient

Home visits and regular phone contact from members of practice staff and where possible trained alcohol liaison nurses is good practice both in terms of patient safety and improving motivation.

Aftercare and relapse prevention

Unfortunately many patients who complete alcohol detoxification relapse after a relative short time. There are ways of reducing this risk of relapse that include:

- good preparation and management of the detoxification

- good support and encouragement after detoxification from practice staff, family and friends
- attending support groups such as Alcoholic Anonymous
- social activities to replace drinking patterns
- medications, such as acamprosate, disulfiram or naltrexone, have been shown to promote abstinence and for some offers significant benefit
- psychological therapies such as skills training and cue recognition have been shown to have some benefit.

Conclusion

Community alcohol detoxification for the large majority of patients is a safe intervention suitable for delivery by GPs working with their primary care teams.

Whilst only small numbers will go on to complete detox and remain abstinent for a significant period of time, patients welcome the intervention from their own GP and in the most seriously alcohol dependent clients the risks can offset the benefits.

For some it may be dangerous, causing immediate and longer term complications. Many of these patients can be readily identified and referred for inpatient detoxification. Even dependent drinkers can, under the right circumstances, gradually reduce their drinking safely without having recourse to an assisted alcohol detoxification.

The Royal College for General Practitioners has recently established a certificate course in the management of alcohol problems in primary care. Please contact the RCGP Substance Misuse Unit for further information jbetterton@rcgp.org.uk

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4 Stockwell T, Murphy D, Hodgson R (1983). The severity of alcohol dependence questionnaire: its use, reliability and validity. *British Journal of Addiction*;78(2):45-156.

Therapeutic interventions in alcohol treatment



Introduction

This article will identify medications commonly used for alcohol dependency in current clinical practice, in particular those that reduce withdrawal symptoms during, and support abstinence after detoxification. The National Institute for Health and Clinical Excellence (NICE) are currently reviewing the evidence and will produce guidance on community

prescribing for alcohol in 2010.

It is important to emphasize that psychosocial interventions (PSI) are an essential component of any prescribing regime, including successful assisted withdrawal and ongoing abstinence; prescribing alone has a limited role in alcohol treatment and should not be carried out in isolation. The PSI should be commenced pre, during and post detoxification, without delay in service provision. Standards regarding the PSI to be delivered and pathways into aftercare need to be defined locally and should follow the evidence base and it is beyond the scope of this article to define which type of PSI should be delivered. However it is important to remember that psychosocial support can come from a variety of sources including alcohol agencies, carers/ family, and mutual aid which the patient may initiate themselves for example Alcoholics Anonymous (AA).

Supplements

Alcohol dependence can reduce the amount of certain vitamins and minerals in the body, especially thiamine (vitamin B1). Therefore it is important to prescribe thiamine supplements to people dependent on alcohol to help prevent Wernicke-Korsakoff syndrome and its resulting brain damage.

Prescribing during the preparation phase for detoxification

1 Vitamins

All patients should be prescribed oral vitamins during this phase in preparation for the assisted withdrawal

Dosage

Thiamine 100mg t.d.s. and vitamin B Co Strong 2 tabs t.d.s.

2 Acamprosate

There is emerging evidence of potential benefit for prescribing acamprosate to reduce the risk of *kindling*¹ in those going through repeated withdrawals from alcohol. The evidence base is not strong and further research is ongoing.

Medications used to treat withdrawal symptoms during detoxification

There are a number of detoxification regimes and most have

been devised locally from experience. It is important to identify a regime that you are confident works for you and your patients though all regimes should be flexible. The dose should be tailored to the person's age, gender and level of drinking prior to detox and adjusted during the detox dependent upon symptoms, ideally using a validated withdrawal symptoms assessment tool such as **Alcohol Withdrawal Assessment Scoring Guidelines (CIWA-Ar)**². The doses and the length of detoxification will vary dependent upon the patient.

The first line treatment for the management of assisted withdrawals from alcohol is chlorthalidone. The use of chlorthalidone and diazepam have the strongest evidence base in the management of detoxification. Sodium valproate or phenytoin may also reduce or stop severe withdrawal symptoms during detoxification.

1 Detoxification programme using chlorthalidone:

- Titrate against the amount of alcohol the patient is using and the severity of the withdrawals they are experiencing
- The regime needs to fit individual need and symptoms
- The Severity of Alcohol Dependence Questionnaire (**SADQ-C**)³ can be used
- Give at least 4 hours between doses
- Use capsules rather than tablets (see drug tariff- this is less expensive)
- Other medication may occasionally be required for the control of symptoms such as diarrhoea, vomiting and itching

Example treatment regime (from Camden PCT primary care alcohol detox protocol 2008)

Daily units or SADQ score	30U/ SADQ30	25U/ SADQ 25	20U/ SADQ 20	15U/ SADQ 15
Monday	30 mg QDS	25 mg QDS	20 mg QDS	15 mg QDS
Tuesday	25 mg QDS	20 mg QDS	15 mg QDS	10 mg QDS
Wednesday	20 mg QDS	15 mg QDS	10 mg QDS	10 mg TDS
Thursday	15 mg QDS	10 mg QDS	10 mg TDS	5 mg TDS
Friday	10 mg QDS	10 mg TDS	5 mg TDS	5 mg BD
Saturday	10 mg TDS	5 mg TDS	5 mg BD	5 mg OD
Sunday	5 mg TDS	5 mg BD	5 mg OD	
Monday	5 mg BD	5 mg OD		
Tuesday	5 mg OD			

2 Detoxification programme using diazepam

Diazepam can be used as an alternative to chlorthalidone and is equally effective in managing withdrawal symptoms. However, unlike chlorthalidone it has a street value.

Use the conversion diazepam 10mgs = chlorthalidone 30mg

Diazepam is often used as a first line treatment in other countries, for example, the USA but in the UK use is generally restricted to those who are using benzodiazepines in addition to alcohol, or those who are not able to tolerate withdrawal with chlorthalidone.

If clients are already taking diazepam then the dose to be used for detox should be increased by the detox regime amount. A decision as to whether to reduce down to nothing (i.e. to detox from

1 Grand mal fits in withdrawal are thought to cause a 'kindling' effect, in which alcohol withdrawals are more readily complicated by fitting in future

2 <http://websterplace.org/Documents/ciwa-ar.pdf>

3 Stockwell, T., Sitharan, T., McGrath, D. & Lang, . (1994). The measurement of alcohol dependence and impaired control in community samples. *Addiction*, 89, 167-174.

alcohol and benzodiazepines) or to the dose of benzodiazepines that was being taken previously should be negotiated with the patient. If the use of benzodiazepines by the patient is high and/or forms part of a pattern of poly-substance misuse, inpatient management should be considered.

3 Carbamazepine

Carbamazepine can be used as an alternative to benzodiazepines in assisted withdrawals. There is some evidence that the risk of kindling is reduced in those using carbamazepine compared with those using benzodiazepines.

Carbamazepine assisted withdrawal regime (from Consensus Statement Framework draft final (21/10/09) Community alcohol detoxification/ assisted withdrawal from alcohol produced on behalf of the North West Specialists' Group following presentation and consultation).

	9.00am	1.00pm	6.00pm	10.00pm	Extra Dose
1 Monday	200	200	200	200	100
2 Tuesday	200	200	200	200	100
3 Wednesday	200	100	200	200	100
4 Thursday	200	100	100	200	100
5 Friday	100	100	100	200	100
6 Saturday	100	-	100	100	None
7 Sunday	100	-	-	100	None

Prevention of Wernicke-Korsakoffs syndrome (WKS)

The prevention of Wernicke-Korsakoffs syndrome (WKS) is an essential component of any assisted withdrawal and there is considerable evidence of the under use of parenteral vitamins in assisted withdrawal with a consequent risk of developing WKS. Parenteral vitamins should be considered in all cases of assisted withdrawals, but especially in those with questionable nutritional status. Replacement by the oral route as mentioned is important but is often inadequate.

The requirement for thiamine increases during withdrawals from alcohol hence the increased importance of prevention during this time. The requirement for thiamine increases during withdrawals from alcohol hence the increased importance of prevention during this time. The identification of at risk WKS patients includes body mass index (BMI), nutritional status, SADQ, and a history of delirium tremens/seizures. Signs and symptoms of vitamin deficiency include vomiting, fatigue, diplopia, insomnia, neuropathy, and cerebellar ataxia.

Signs and symptoms of incipient WKS are confusion (this is the only symptom in 80% of cases) +/- ataxia and ophthalmoplegia. If a patient presents with these symptoms it should be considered a medical emergency and the patient needs to be admitted immediately. On arrival they will require 2 pairs of Pabrinex ampoules t.d.s. IV for 3 days.

There is a small risk of anaphylaxis, approximately 1 in 4 million with parenteral vitamins. Staff involved will need training in the identification of at risk patients, identification of WKS, the administration of Pabrinex and the management of anaphylaxis.

Medications used to support abstinence

1 Acamprosate (Campral®)

Acamprosate is licensed for use in alcohol dependent individuals who are attempting to maintain abstinence from alcohol as an adjunct to appropriate psychosocial interventions and support. The contraindications for use of acamprosate are liver failure or having an allergic reaction.

Dosage

Acamprosate comes as 333mg enteric-coated tablets

Weight >60kg 666mg (2 tablets) t.d.s.

Weight <60kg 666mg morn, 333mg midday and 333mg 6pm

Acamprosate is often better taken with food although this may slightly reduce bioavailability. The patient should be advised at the outset that evidence shows that treatment continues to confer benefit for up to 12 months. Active PSI is an essential component of treatment for continued abstinence. Acamprosate works best in those who are abstinent but may also reduce the risk of relapse to heavy drinking in those who are drinking (acamprosate does not interact with alcohol), so ongoing alcohol use should not be a reason to stop treatment unless a relapse to heavy drinking is obvious.

Discussions about the use of acamprosate should form part of the assessment and preparation phase of assisted withdrawal.

2 Disulfiram (Antabuse®)

Disulfiram should be considered in motivated patients at an early stage in preparation prior to detoxification. There are significant risks associated with the use of disulfiram and staff must be competent to discuss these risks with the patient. These include contraindications, most importantly heart disease (active or in the past 6 months, or tendency to cardiac arrhythmia), and interactions. Prescribing disulfiram should follow a physical review, including LFTs (exclude if bilirubin >25mmols and/or GGT > 10 times normal and /or ALT or Alk Phos > twice normal). An ECG may be required if cardiac history is uncertain. Ideally the patient should be able to identify a carer to supervise the medication to enhance treatment adherence and efficacy, or it can be supervised by the pharmacist, with prior agreement.

Disulfiram works by preventing the breakdown of alcohol by irreversibly blocking the enzyme acetaldehyde dehydrogenase. If alcohol of any kind is consumed by an individual taking disulfiram, within 10-15 minutes they will experience an unpleasant reaction mediated by the build-up of acetaldehyde characterised by facial flushing, headache, palpitations, tachycardia, dyspnoea, nausea and vomiting. If large doses of alcohol are taken the reaction can progress to hypotension, arrhythmias and collapse. The reaction can last for several hours. The severity of the reaction varies between individuals some having severe and occasionally life-threatening reactions, others having mild or no reaction at standard doses (the latter group may require higher doses). All those prescribed the medication should be given a patient advice leaflet warning against sources of 'hidden' alcohol such as Christmas pudding, liqueur chocolates, and even certain cosmetic products. Disulfiram works by changing the expectancy of the effects of alcohol from positive and rewarding to negative and aversive.

The action of disulfiram lasts for 7 days after the last dose. The patient **must** be warned that they will not be able to drink safely for this period. Disulfiram gives patients the opportunity to cope with a variety of situations without alcohol and, therefore, the individual must also be engaged in psychosocial treatment aimed at relapse prevention and the development of alternative coping skills whilst on the medication. Treatment is usually for 6-12 months but may be longer, if required.

Dosage

200mg / day, or 400mg on alternate days, but occasionally individuals require doses as high as 600mg per day.

...continued overleaf

3 Naltrexone

Naltrexone is an opiate antagonist but has also been shown to be effective in improving outcomes in patients undergoing alcohol treatment. It is not currently licensed for this use in the UK. There is some evidence (in particular from the US where it is licensed for this indication and hence used more widely) that it may be more effective in those patients who are considered at risk of relapse and may reduce the risk of relapsing to heavy drinking in those who lapse to drinking after completing an assisted withdrawal.

Duration of treatment is 3 months though evidence for longer term use is currently being evaluated. There may be continued benefits after stopping drinking. Side effects include nausea, headache, requirement for analgesia, dysphoria, hepatotoxicity (therefore LFTs need to be checked at 3 months). A warning card should be given for the patient to carry to warn emergency healthcare teams of opiate blockade. Psychosocial interventions such as cognitive behavioural therapy and / or coping skills are an essential component for efficacy of this medication. Prescribing of this off-licence medication should be discussed with an addiction specialist.

Dosage

The starting dose is 25mg; the treatment dose 50mg daily

New on the horizon

- Topiramate (Topamax), used to treat seizures. One recent US study shows that it also might help treat alcohol problems
- Naltrexone injection (Vivitrol) – currently used the US but not in the UK

Further reading

Duncan Raistrick, Nick Heather and Christine Godfrey (2006) Review of the Effectiveness of Treatment for Alcohol Problems November

Department of Health (2006) Models of Care for Alcohol Misusers (MoCAM)

Chris Ford, Stephen Willott and Carsten Grimm, using adaptations from Brent Alcohol Guidance for General Practitioners 2004, Camden PCT primary care alcohol detox protocol 2008 and **Consensus Statement Assisted Withdrawal from Alcohol (2009)** produced on behalf of the North West Specialists' Group

Advocacy in drug treatment services has become increasingly common but appears to be a rare commodity in alcohol services. Alan Clayton provides a personal view into the nature and challenges of this role. Ed.

Advocacy: a personal view

I have been employed as an alcohol worker/user advocate for some 10 months now. I work for an organisation called Livin IT! whose remit is to consult and advocate on behalf of drug and alcohol treatment service users throughout Nottinghamshire County. There are many examples of user advocates in the drug field but precious few in the alcohol field.

In the 10 months I have been in post I have attended a number of training courses, including an Introduction to Independent Advocacy. This certainly opened my eyes to the value of *independent advocacy* and what it is (strongly and publicly supporting someone or something) and what it is not (befriending, counselling, physical caring or advising). It has also helped me to understand how difficult this can be and how easy it is to cross over into advising or supporting someone and no longer being a powerful and *independent* advocate.

Livin IT! provides an advocacy service not only to service users in treatment, but also provides the service to anyone affected by substance misuse. The advocacy is

not limited to treatment services but may also encompass aftercare, wrap-around services or any other services that may be involved in or needed by the client.

“as advocates it is not our job to advise or recommend actions, but to provide options, discuss consequences and let the client make their own decisions based on the facts presented”

As well as specific one-to-one advocacy, we fulfil a wider function in representing service users and those affected by substance misuse. In order to represent those wider views we regularly conduct a series of service user consultations at various venues across the County, varying from drop-in centres to working alongside treatment clinics. The outcome from these consultations is shared with the service providers and commissioners in order to inform service planning and delivery. Whilst this is not advocacy in its purest form, it is a very important aspect of the job – and is often the route by which specific advocacy cases are identified. This work also elevates the profile of Livin IT! and provides an easy way for clients to encounter and access the advocacy service.

The role of an advocate working with alcohol misuse is varied and diverse involving many issues and multiple organisations.

As with any group there are those who are not able or capable of representing themselves in a formal setting. Of course, it is always preferable to empower service users to represent themselves, sometimes by merely providing them with support to be able to do so for example by attending meetings with them.

The wide range and variety of advocacy cases can be as simple and straightforward as making a referral to a service, to complex and on-going negotiations involving multiple agencies, and multiple meetings. As advocates we can help service users to negotiate gaps in provision and also to identify them to the services involved and hopefully plug gaps for the future.

The objective of treatment should be that the individual returns to society and performs a productive role and is balanced and content, as much as anyone can be, in their environment. The overcoming of difficulties, the provision of support and signposting to appropriate organisations can go a long way towards helping with recovery in the wider sense of the word. However as advocates it is not our job to advise or recommend actions, but to provide options, discuss consequences and let the client make their own decisions based on the facts presented.

Advocates cannot fix everything but we can go a long way towards assisting with the improvement of outcomes for those with alcohol misuse issues.

Alan Clayton Alcohol Worker/ User Advocate Livin IT!

With alcohol-related hospital admissions increasing at a rate of around 70,000 per year, alcohol misuse is a national problem. **Katie Porter**, Alcohol Strategy Manager at NHS Bristol, explains how she commissions GP-led services to tackle it. For more on good practice in commissioning, see **Janet Crampton's** article on *commissioning learning sets* on our website <http://www.smmgp.org.uk/> **Ed.**

Helping patients to manage their drinking



In Bristol, alcohol harm prevention is an important area of work and NHS Bristol has identified alcohol as one of our strategic priorities. Our hospital admissions for alcohol-related harm are above average. That's not just for liver disease, but also for conditions like stroke and types of cancer – health problems that a lot of people do not know can be linked to their alcohol consumption. It is estimated that for the year 2007-08 the total cost of alcohol-related admissions in Bristol was over £3.5 million. And alcohol misuse has a wider impact on society than just the individual's health – there is also the harm caused to the family and community by alcohol-fuelled crime. Alcohol attributable crimes in Bristol run at double the national average.

One proven way to help many of those drinking over the recommended guidelines and putting their health at risk – and one that can be led by GPs – is to deliver alcohol identification and brief advice. The process involves using a questionnaire tool – the AUDIT¹ or one of its shorter forms, such as FAST² – to identify whether a patient is drinking at increasing or higher-risk levels, followed by five minutes of brief advice aimed at getting patients to think about reducing their drinking. We rolled out the alcohol Direct Enhanced Service (DES), introduced by the Department of Health, last year, and that means GPs in Bristol have a financial incentive to deliver brief interventions for all patients newly registering with them.

We recommended the Department of Health identification and brief advice e-learning module, www.alcohollearningcentre.org.uk/elearning/IBA, to GPs in Bristol when the DES came in. It's a great resource – free, easy-to-use, and a good way to help GPs bolster their confidence in delivering the DES by improving their knowledge and skills in an environment they can control. GPs can then go on to the Royal College of General Practitioner's Certificate in the Management of Alcohol Problems in Primary Care.

We are also currently developing a Local Enhanced Service, where GPs will screen patients with hypertension, cardiac arrhythmias and new depression. They will deliver five minutes of brief advice to increasing risk drinkers (who score 9-15 on AUDIT). Patients scoring 16-19 on AUDIT (higher risk drinkers) will be offered a 30 minute brief advice and information session with a trained 1:1 worker, with a three-month follow up to see how they are getting on.

People scoring 20+ on AUDIT (falling into the dependent spectrum) are assessed by their GP and referred on to a specialist alcohol service. If the patient does not agree to this, they are offered motivational interviewing (up to two 30-minute sessions) or group work.

For some of the most vulnerable drinkers in Bristol we commission a weekly wet clinic for street drinkers run by a GP and alcohol nurse. The doctor deals with infected wounds, ulcers, emergency contraception for street sex workers, vitamin injections, referrals to A&E if necessary, and supports some patients as they move towards deciding they want detoxification.

“One proven way to help many of those drinking over the recommended guidelines and putting their health at risk – and one that can be led by GPs – is to deliver alcohol identification and brief advice”

In the current financial climate, commissioning new services is challenging. We need to be able to demonstrate that new services are cost effective and that they will save money within a reasonable time frame. This is tricky with preventative work to tackle alcohol related harm as the results may not be apparent for some time. At NHS Bristol we have drilled down into the statistics to identify cohorts of patients with existing conditions that lead to a higher probability of admission if they misuse alcohol – that's how the development of our new GP service targeting those with hypertension, cardiac arrhythmias and new depression has come about. We've also done some taxing statistical work to arrive at an estimate of admission savings if we deliver brief interventions to these vulnerable groups.

And it's not just GPs we've got involved. We've been working with the prison health service to develop an alcohol care pathway and, funded by the Home Office, we are piloting alcohol arrest referral in our custody suites. We're also encouraging sexual health doctors and nurses to take the e-learning module, as well as the Bristol University counselling service so that they are equipped to help our large student population.

In order to reduce the level of alcohol related harm we have in the community, we need to ask as many health workers as possible to take alcohol misuse seriously and respond appropriately. Each worker might think that their contribution is tiny, but combined with the contribution of others it can change the way the patient thinks about their alcohol misuse and help them address their drinking.

Katie Porter, Alcohol Strategy Manager at NHS Bristol

1 http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf

2 http://www.nice.org.uk/niceMedia/documents/manual_fastalcohol.pdf

We were bowled over at last years users conference when we first heard of using alcohol itself to detox from alcohol – we were unaware of this approach and originally had concerns about the safety and efficacy of the method but were amazed by the personal and project success stories. The work has been evaluated with good results and is currently undergoing further evaluation. Although we know of no other project that undertakes alcohol detoxifications with alcohol hence there is little evidence, we feel it is important and exciting to feature this innovative project. **Ed.**



Michael Varnam House: alcohol detoxification using monitored alcohol consumption

Background

Michael Varnam House opened on the 15th December 1999 in Nottingham as a residential unit for homeless people who wanted to change their drinking behaviour but not necessarily choose abstinence. A qualified nurse was employed at the unit to allow detoxification on the premises and in its infancy chlordiazepoxide was the only drug of choice at the service.

The alcohol detoxification using alcohol arose out of service users regularly drinking excessively and then demanding chlordiazepoxide again and again to combat unpleasant common withdrawal symptoms. Michael Varnam House is all about promoting personal responsibility and what better way to instil in people the idea that they can control their drinking than to aid them do so in a controlled way? With the help of the consultant for alcohol in Nottingham, a safe plan was devised using four standard units of alcohol each time the substance was dispensed.

The aim of the detoxification is to comfortably achieve a negative breath alcohol reading in the absence of any physical withdrawal symptoms

Why use alcohol?

- the process engages service users in treatment rather than having something 'done' to them
- there is no better way of suppressing withdrawal symptoms
- it promotes an increase self efficacy with regard to future drinking
- there is a decrease in the use of hospital beds and the reliance on primary care with huge cost savings being made to statutory services.

Inclusion criteria

Service users must experience physical withdrawal when alcohol consumption is reduced. Abstinence is the immediate, but not necessarily the long term goal and there must be an agreement to wider treatment plans.

“ The alcohol detoxification using alcohol arose out of service users regularly drinking excessively and then demanding chlordiazepoxide again and again to combat unpleasant common withdrawal symptoms ”

Exclusion criteria

Clients are excluded if a service user insists on using benzodiazepines or current use is already in place. The reasons for this exclusion are the potential for significant physical deterioration that may lead to the need for transfer to an acute medical ward, and the potential for cognitive impairment.

How is it done?

The service user is asked to choose what alcohol he/she would like to use and a base line breath alcohol reading is taken. As soon as that reading falls, four units of alcohol are given and the service user is taken to a safe environment to socialise with others if appropriate. Encouragement to drink other fluids and to eat a meal is given. After three hours the service user is breathalysed again and if the breath alcohol reading is lower than the previous reading then four more units of alcohol are dispensed. This process goes on until the service user reaches a negative breath alcohol reading in the absence of any physical withdrawal symptoms (usually between five and eight days).

The process challenges service users views that if they have one drink they will have one thousand drinks as on average they will go between two and a half to four hours without alcohol, depending on the rate at which it is metabolised.

Safety

No service user has ever experienced withdrawal symptoms as the process is slow enough to suppress them. Incidents of seizures and delirium tremens have been minimal. Feedback forms given to all service users who complete the detoxification indicate that 100% have preferred the process to detoxification using chlordiazepoxide.

Evaluation

Michael Varnam House is a ten bed unit and all service users using the service have been through the detoxification process. Newcomers are encouraged and supported by their peers and staff and surprisingly in the eight and a half years the detoxification has been running only four people have walked out in the immediate hours of treatment and another four have not completed the detoxification.

A full evaluation of the service is being conducted as part of my MSc in Substance Misuse, the results of which will be freely available on completion. One article regarding the detoxification has already been published:

Neil R Wright and Caroline Thompson (2002) Withdrawal from Alcohol using Monitored alcohol Consumption: A Case Report, , alcohol and alcoholism vol. 37. No. 4, pp 344-346

Caroline Thompson, RN, DN, SP

Jack Leach and Linda Harris are Dr Fixit to a GP who is considering providing a community alcohol detoxification. For more advice on this topic, see their article on page 10. Ed.



Dear Dr Fixit,

I have been seeing Bill about his alcohol problem for a few months and he has now decided that he wants to stop drinking. He is currently drinking 4 (500ml) cans of Stella (5%) and about ½ bottle of vodka daily which is about 25 units / daily or 175 units / week.

He has had one previous inpatient detox 2 years ago but did not complete and has tried to self detox on many occasions but in the last 4 years he hasn't succeeded longer than 2 weeks without returning to drinking alcohol. His dependency dates back to when he and his best friend were travelling in a car that crashed. Bill escaped with minor cuts but his friend was killed.

His only medical history of note is that he is hepatitis C PCR positive although he has never injected and he has abnormal LFTs. He is currently living in a hostel which accommodates people who are drinking and he has a girlfriend who says she will support his detox but does drink above safe levels herself.

Bill is uncertain as am I, whether he would be better having an inpatient or community detox – can you please advise?

Answer provided by Jack Leach and Linda Harris.

An interesting question with the sort of problem that a general practitioner might commonly encounter. The key issues and assumptions I have made are:

- Bill is probably a middle aged man who has been drinking heavily and regularly for many years. He has only become aware of problems from his drinking over last four to five years, suggested by his attempts to stop and presumably also to cut down. These attempts, including an inpatient detoxification, have not resulted in any substantial time not drinking
- he seems to have some degree of liver dysfunction, which is most likely to be mild and reversible. He has hepatitis C infection. Alcohol increases the risk of progression of hepatitis C. It also suggests that he may have or have had problems with illegal drug use or a blood transfusion prior to the early 1990s
- he has mild anxiety and mood problems, almost certainly aggravated by his drinking and social circumstances. It is not unusual to attribute problem drinking, drug use or other problematic behaviours to past traumatic experience. This does not necessarily mean a causal relationship but one that must be acknowledged. However, in my experience a patient can address and control their behaviour without necessarily having specific treatment for the difficulties they with dealing with regarding their traumatic experiences
- he is living in a hostel, so presumably he also has financial problems and little social support from his family
- he has a girlfriend who seems to drink excessively as well.

The first question is whether a further assisted alcohol detoxification is appropriate at this time. Reasons for doing one include;

- he has asked and so should be committed to stop drinking and is motivated to make a change
- by stopping drinking his liver disease could improve, other aspects of physical health could improve and his risk for further health damage from alcohol may be reduced or stopped.
- his mental health and social

circumstances could improve.

Reasons for not detoxing include:

- repeated previous attempts to stop drinking have not been helpful, why should this time be different?
- his social circumstances are not conducive to achieving and remaining abstinent.
- assisted alcohol detoxification contains small but significant risks of immediate and longer term harmful health consequences. These include; severe alcohol withdrawal syndromes such as fits, Wernicke's, delirium tremens and alcohol hepatitis and their longer term sequelae such as Korsakoff's and alcohol dementia. Research suggests that repeated assisted alcohol detoxification seems to sensitise people making their withdrawal symptom sequentially worse independently to the duration of drinking (kindling effect). There is the risk that Bill may continue to drink with the detoxification agent (usually chlordiazepoxide) and this may lead to accidents and injury and the results of disinhibited behaviour.

In my opinion, the potential harms to health of assisted detoxification during the period of detoxification and immediately after, are higher than the harms to health of continuing to drink during that period. It is only if the patient becomes abstinent or markedly reduces their drinking for at least three months after that the benefits of stopping drinking are likely to outweigh the risks of the assisted detoxification.

An alternative approach might be to support the patient to reduce their drinking over time. This has the advantage that it is likely to be safer than assisted detoxification, and is achievable - but the disadvantage that the patient may well have tried before and feels unable or unwilling to do this. Bill's current alcohol consumption is around 25 units per day, 175 units a week, which though considerably above recommended limits is not unreasonably high for this approach. One could work with him to reduce his consumption by 10% per week. Initially that is a reduction of 2 units per day, 17 units per week.

However, if you do decide to proceed with the assisted alcohol detoxification where should it be carried out, community or inpatient/residential? Several factors may influence your decision, including patient preference

...continued from previous page

and access to inpatient facilities. I think three factors need special consideration; effectiveness, safety and cost.

The effectiveness of an inpatient detoxification is likely to be marginally higher. Most studies suggest higher completion rates from inpatient alcohol detoxification than community detoxification after taking into account different case characteristics. However, relapse rates at three months seem very similar - although this probably reflects the effectiveness of aftercare support services rather than the site of the detoxification.

Inpatient will generally be safer than community detoxification for those at risk or who develop severe complications, because inpatient can more easily:

- closely monitor patients
- give parenteral B vitamins to prevent or reduce the risk of Wernicke's syndrome
- give higher doses of

chlordiazepoxide and tailor it better to withdrawal symptoms, reducing the risk of severe withdrawal syndromes

- recognise and provide earlier specific treatment for severe complications, such as vomiting and diaphoresis with fluid balance and electrolyte problems, per rectum diazepam for fitting, parenteral vitamins for Wernicke's and sedation for delirium tremens, prior to transfer to hospital.

No matter how you do the economic analysis inpatient units are considerably more expensive.

Although Bill does not appear to have a history of severe alcohol withdrawal symptoms or syndromes, certain factors suggest he may be at least at risk of them. These include his age and duration of drinking and alcohol related liver disease. If a patient has signs of alcohol damage in one organ it is likely they have

damage elsewhere and that their risk of severe alcohol withdrawal syndromes is significantly raised. It is unclear if Bill has been losing weight from alcohol enteropathy, or if he has hypertension or cardiomyopathy or associated peripheral neuropathy, proximal myopathy. If he does not have these it is likely that he is not at moderate or high risk of severe alcohol withdrawal and so a community detoxification should be relatively safe. However, his social circumstances are not really conducive to community detoxification.

Jack Leach, Clinical Director Cheshire Substance Misuse Services, Lead Doctor Smithfield Services, Manchester National RCGP Co-Lead for Alcohol

Linda Harris, Clinical Director, Wakefield Integrated Substance Misuse Services and RCGP Substance Misuse Unit

Emily Finch provides advice to a GP who is concerned about a patient on methadone who is drinking problematically. For Pharmacist Fixit's views on this topic see **Nazmeen Khideja's** article on our website <http://www.smmgp.org.uk/> Ed.



Dr Fixit on alcohol and methadone

Dr Fixit alcohol and methadone

Paul, aged 28 years came to us a few weeks ago when he was housed temporarily in the bed and breakfast around the corner. His drug service transferred him and his prescribing

apologetically, stating 'he was a bit of a nightmare, but a nice one!' They had stabilised him well on 60mg of methadone mixture which he picked up on a daily basis and his use on top was almost nonexistent. But they said they had not managed to help with his alcohol problem and in fact his drinking had increased since coming into treatment 6 months ago. Before starting treatment when he was using heroin and crack he was drinking between 35-45 units a week but on transfer was drinking up to 18 units (2 litres of 9% cider) a day and was occasionally bingeing on bottles of vodka (about 2 per week) totalling about 186 units per week. This is his first episode of treatment and he was found to be hepatitis C and HCV PCR positive four months ago. His liver function tests are mildly deranged but as yet he has declined referral for his liver.

Since taking over Paul's care we have increased his methadone to 80mls at his request to try and reduce his drinking. This worked and he now has managed to stop all vodka use but continues on 2 litres of cider a day. We have encouraged him to keep drink diaries, and he has partially engaged with the drug and alcohol counsellor but he continues to drink at these levels. Paul explained to us that alcohol was his first addiction. He began alcohol use when he was about 15 years old and had a problem

by the age of 16, and it was only once he started to use heroin that he reduced his alcohol use. We have a breathalyser but don't really use it, have never stopped or withheld a script due to the risks associated with his drinking, and haven't as yet tried supervised consumption. Someone suggested antidepressants but we are concerned about overdose risk and whether he is actually depressed.

We are really struggling with how to help Paul and his alcohol problem and would value your help.

Answer provided by Emily Finch, Consultant Addiction Psychiatrist South London and Maudsley Foundation NHS Trust.

Paul's problems are pretty typical of a significant minority of patients on methadone maintenance who manage to stop or significantly reduce their opiate use but continue drinking dependently at levels that are causing them significant health damage. Many, like Paul, feel alcohol is their primary problem and they perceive their alcohol intake as much more difficult to control.

They are particularly difficult group for doctors because they really are "drinking themselves to death" as they often have hepatitis C and their livers deteriorate very fast if they continue drinking. However, as with any problematic substance misuse

patient it is important not to give up but to remain hopeful whilst systematically working through some strategies to see if any of them help.

What you have done so far is good. Alcohol increases the metabolism of methadone in regular users so can effectively reduce methadone dose¹. The extra 20mg sounds as if it has increased his methadone level to one that is reducing his craving for opiates adequately. If it had not done so another increase may have been useful.

I would want to understand more about what Paul's level of motivation to stop drinking is as this will affect the sort of possible treatment available. Motivation is often thought of as something that an individual has or does not have. It is much more usefully regarded as a continuum of behaviour which is directed towards a particular goal. It is also best assessed by what someone does rather than what they say. Paul shows some motivation (e.g. filling in drink diaries) but you need some strategies to push him further along the continuum towards abstinence based treatment. Some of these are very simple and come naturally to many doctors, such as emphasising the possible benefits of not drinking, helping him look at the pros and cons, finding possible solutions and above all giving him hope and having positive expectations for him.

The breathalyser may come in useful here. Breathalysers are used for a variety of reasons. The most common use is to monitor breath alcohol before giving methadone in supervised dispensing programmes. Patients and many practitioners often think this is done because of the dangers of mixing methadone and alcohol which can cause acute problems (e.g. after an alcohol binge) but in dependant drinkers the tolerance to both alcohol and methadone means there is little danger of overdose. What it does do is give patients a level of breath alcohol (usually the drink driving limit – but other levels can be used) which they have to be below in order to have methadone. This means they have to learn to control their drinking to a certain degree, for example by stopping drinking before 10pm the previous night. It also sets boundaries for acceptable levels of drunkenness in a clinical service.

In practice breathalysers are useful and can help many patients control their alcohol use. Many do reduce their drinking in response to the withdrawal of, or threatened withdrawal of a prescription, although there is no formal evidence base for this. It is also very important that the breathalyser does not become a punishment tool rather than part of a plan of care which incorporates other measure to help polydrug users to reduce their alcohol consumption.

In Paul's case where his drinking is stable and chronic the breathalyser may be most usefully used as a motivational tool. You could measure his blood alcohol content (BAC) at all appointments to help him make the link between his drinking and the level of alcohol in his body. It is also useful to do liver function tests (LFT) at regular agreed times so he can monitor the effect his drinking is having on his liver.

Supervised dispensing of methadone would almost certainly be unpopular with Paul although it does allow you much more control over the prescription and the amount consumed. Again I think it is most useful motivationally. There is a fine balance between punishing clients for their behaviour and encouraging them to make changes in order to gain control of their lives. Paul may be more likely to reduce his drinking if he can see a possible reward of a take away prescription. You may want to give Paul some goals such as a more flexible pick up regimen in response to zero BAC at appointments.

There are some obvious things that need to be addressed. Paul is living in a bed and breakfast. He probably needs re-housing and any changes may be difficult for him until he has the security of permanent housing. He may also have relationship issues that need resolving and may need vocational support such as attendance at a course which, even if not directly relevant to employment may increase his confidence.

If you have managed to increase Paul's motivation you and he may want to consider a formal detoxification programme. If he is low risk (no history of seizures or delirium tremens, not living alone, reasonable physical health) you can do a community detoxification with chlordiazepoxide if he can be seen daily in the surgery or at home, but be mindful of the extra risk of overdose after his tolerance is reduced. If not, you may be able to refer him for a residential/inpatient

detoxification although in many areas this may require referral back to an alcohol service for assessment and aftercare planning.

None of the detoxification options are much help without continued relapse prevention. Is there a local alcohol or general substance misuse day programme where he can be referred? While some residential services will not take clients on methadone, day programmes often will. They may also be able to enable him to access education, training and employment, as well as enjoyable social or physical activities. The evidence base is very clear that Alcoholics Anonymous (AA) or other peer-support 12-step group approaches are likely to help. Again not all meetings will let those still on methadone attend but many will. Paul may well be helped by a service advocate taking him to a first meeting and introducing him to the AA principles.

This may all take time - even years in some cases. He may only improve a little but all progress is better than none. What do you do if he does not change? You need to reduce the harm of his drinking as much as possible. Regular LFTs, oral thiamine, especially if he is malnourished (although the evidence of effectiveness of oral thiamine when drinking is not clear) and helping him with his housing and relationship issues are still important. A prescribing regime that allows you to monitor him (which may mean supervised dispensing) is important. Finally – do not give up hope. Many patients take years to change and if you give up on him he is likely to give up on himself.

Emily Finch, Consultant Addiction Psychiatrist South London and Maudsley Foundation NHS Trust

¹ Clark N, Dietze P, Lenné M, Redman J (2006) Effect of opioid substitution therapy on alcohol metabolism *Journal of Substance Abuse Treatment*, Volume 30, Issue 3, Pages 191-196

CONFERENCES AND EVENTS

RCGP Certificate in the Management of Alcohol Problems in Primary Care

Date (London): Friday 19 February 2010, 9.30am-5.00pm

Venue: RCGP, Hyde Park, London

Cost: £250 per person

Contact Jo Betterton Tel: 020 7173 6095 E-mail: jbetterton@rcgp.org.uk

RCGP Certificate in the Management of Drug Misuse – Part One One day National Events 2010

RCGP, 14 Princes Gate, Hyde Park, London, SW7 1PU

15 March 2010

03 June 2010

28 September 2010

23 November 2010

Course Fees: £250 which includes further reading pack

contact Lorna Boothe at the SMU (0207 173 6093) or lboothe@rcgp.org.uk

RCGP 15th National Conference: Working with Drug & Alcohol Users in Primary Care - Integrating Practice and Policy: Everyone's Business

Date: Thursday 22 - Friday 23 April 2010

Venue: SECC, Glasgow

For information visit smmgp.org.uk

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Book a place at both
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Date: Sunday 25 - Thursday 29 April 2010

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For further information please visit...

Web: www.ihrconferences.net

The RCGP Certificate in the Management of Alcohol Problems in Primary Care

The Substance Misuse Unit of the Royal College of General Practitioners (RCGP) has developed a course aimed at treatment and intervention for alcohol related problems in primary care. The course is designed to enable candidates to deal with alcohol related problems across a wide range of issues, from identification of problem drinkers and brief interventions, to safe community detoxification. It is open to everyone working in primary care, but is aimed at GPs, including those who want to develop a special interest. Healthcare professionals already working in substance misuse who wish to gain more

competence in alcohol treatment will find it useful as many clients oscillate between the use of illicit substances and alcohol, or use both together.

Candidates should complete the e-learning module developed by Department of Health, which is free of charge, and complete a workbook, before attending a face-to-face event. The course fee is £250, which includes the attendance at one of the face-to-face training days, the workbook and a training pack.

The e-learning module is already available at the Alcohol Learning Centre (<http://www.alcohollearningcentre.org.uk/eLearning/IBA/>), an online resource run by the Department of Health.

To learn more about the certificate, or to book a place at a face-to-face event, please contact **Sally O'Neill** at the Substance Misuse Unit of the RCGP on 020 7173 6092, or email eventssmu@rcgp.org.uk. The Substance Misuse Unit of the RCGP has a list of local and national face-to-face events

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